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BEFORE THE

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FEDERAL COMMUNICATIONS COMMISSION

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

WASHINGTON, D.C.

In the Matter of

Implementation of Section 25
of the Cable Television Consumer
Protection and Competition
Act of 1992
Direct Broadcast Satellite
Public Service Obligations

) MM Docket No. 93-25
)
) NPRM 93-91
)
)
)
)

COMMENTS OF

LOCAL-DBS, INC.

EDWARD L. TAYLOR
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May 21, 1993

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SUMMARY

The comments of LOCAL-DBS, INC. in this filing are directed to that portion of Section 25(a) of the Cable Television Consumer Protection and Competition Act of 1992 that requires the Commission to ".....examine the opportunities that the establishment of direct broadcast satellite service provides for the principle of localism under this Act, and the methods by which such principle may be served through technological and other developments in, or regulation of, such service."^{1/} LOCAL-DBS, INC. is a corporation conceived in mid-1990 and formed in early 1991 to address (by satellite) this very principle of localism in Broadcasting.

A business and technology plan has been developed such that every local television Broadcast station in the USA can transmit programs to its 200 or 300 mile diameter local coverage area (without interfering with or eliminating National DBS service). Should more than one market be served by a given spot beam, a blackout feature in software will preserve market integrity. The technical and financial feasibility of the LOCAL-DBS, INC. plan is summarized herein.

From a technical standpoint, there is minimal outage risk compared to the National (CONUS) systems currently authorized by the Commission. The LOCAL-DBS transponders utilize low power (7 to 15 watt) solid state amplifiers as opposed to the 120 or 240 watt tube

^{1/} Section 25, Cable Television Consumer Protection and Competition Act of 1992, enacted by Congress on October 5, 1992.

amplifiers for the National systems. The antenna to produce the spot beams is a 12 ft. diameter dish with a very simple feed. By utilizing the inherent geographic isolation in the beams, a frequency re-use factor of 16 is obtained, yielding a very spectrally efficient system. The channel capacity of the system is enhanced by using digital compression technology. Four to eight TV channels of broadcast quality NTSC video, with near CD quality audio, can be accommodated in each transponder. Assuming that the HDTV standard adopted by the Commission has a data rate of 15 to 20 Mb/s, two signals could be accommodated per transponder.

The cost of a satellite to provide the LOCAL-DBS function is only nominally more expensive than a high power National coverage satellite. The added cost lies in the fact that many more transponders are on-board. This cost is partially offset by the fact that the amplifiers and their power supplies are less costly. The basic bus (power and weight capacity), propulsion subsystem, and T&C subsystem are virtually the same as the high power National coverage satellites.

In brief, the technical and financial feasibility of localism in DBS does exist and business plans are in motion to provide this service.

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I. INTRODUCTION

1. LOCAL-DBS, INC., pursuant to Section 1.415 of the rules of the Federal Communications Commission (the Commission), hereby submits its comments in response to the Notice of Proposed Rule Making (NPRM) which was released in the above captioned proceeding on March 2, 1993. LOCAL-DBS, INC. is a corporation formed by entrepreneur Edward L. Taylor^{1/} with the express purpose of providing TV Broadcast localism in the Direct Broadcast Satellite Service.^{2/} Planning for this corporation began in mid-1990, and the corporation was granted a charter in the State of Oklahoma on February 27, 1991.

2. LOCAL-DBS, INC. supports the effort of the Commission to impose public service requirements on DBS operators and/or programmers as directed by the Cable Act.^{3/} Because most of the program suppliers on the LOCAL-DBS satellites will be either existing terrestrial Broadcasters or other local entities, LOCAL-DBS will incorporate whatever public service requirements the Commission mandates in accordance with Congress' intent.

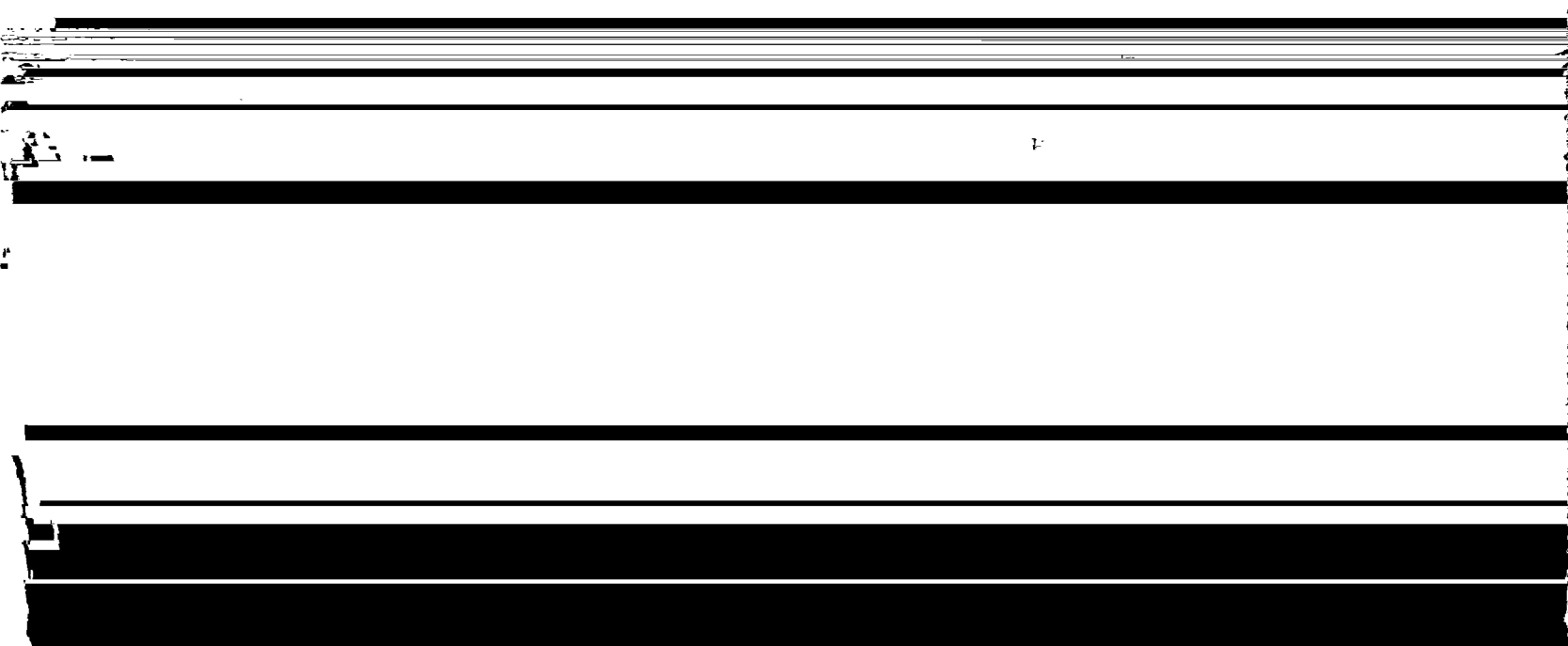
^{1/} See Attachment 6, page 2 for a listing of officers in the company and Attachment 1 for their backgrounds.

^{2/} CFR 47, Part 100.

^{3/} Section 25, Cable Television Consumer Protection and Competition Act of 1992, enacted by Congress on October 5, 1992.

3. The main thrust of these comments addresses the technical, marketing and financial feasibility of providing localism in DBS.^{4/} By including in the existing DBS arc the local ATV Broadcaster along with the new National television DBS services, the best of both worlds will have been obtained. This complementary "tower-in-the-sky" arrangement should serve the public interest better than the terrestrial Broadcast system. The nations' present TV Broadcast system, with the able assistance of Cable TV, has served the public interest extremely well until now. Because the digital world is closing in rapidly and ATV is nearing its release a totally different transmission system is required. Every citizen needs the ability to receive what he or she wants, when they want it and without waiting decades for a new transmission "railroad" to be constructed, one that will probably never be able to reach the millions of true rural dwellers.

4. As witness the present "you pay me" controversy between Cable TV and Broadcasting, TV Broadcasters should, in the public interest, have their own means of reaching the TV viewer without being at the mercy or dependence of a benevolent third party territorial-extension provider. It is LOCAL-DBS' position that a direct-to-the-home local and national



II. INTEREST OF LOCAL-DBS, INC.

5. By submission of these comments, LOCAL-DBS, INC. would like the record in these proceedings to show that localism as currently exists in terrestrial broadcast of television^{5/} is technically and financially feasible in the DBS service. In the NPRM, the Commission stated that no proposals for local coverage spot beams were known for Ku Band facilities.^{6/} It is true that LOCAL-DBS, INC. has not gone forward with a formal proposal and application to the Commission because final business plans cannot be formulated until the Commission's ATV issues are resolved. Nonetheless, the trade press has presented several articles on the Company's general plans.^{7/} In addition, Mr. Norman Weinhouse presented a technical paper at the 1992 NAB Convention.^{8/} I, the undersigned Edward L. Taylor, also presented a paper to the 1992 NAB convention.^{9/} To support LOCAL-DBS, INC. in

III. TECHNICAL FEASIBILITY

SPOT BEAMS

6. At the DBS frequencies (12.2 to 12.7 GHz), a 12 ft. diameter parabolic antenna will have a gain of approximately 50 db and a beam width of approximately 0.5 degrees. At synchronous altitude this beam will produce half power coverage of approximately 200 miles in diameter on the earth. Furthermore, it fits very nicely on modern launch vehicles.^{11/} Directional pointing of the beam(s) is accomplished by displacement of the feed from the parabolic axis of revolution.^{12/} Because each beam has a separate feed, efficient transfer of power to the antenna is obtained in the spacecraft. It is possible to build spacecraft that contain transponders for both Local beam and National beam applications.

7. Because the power of a transponder is concentrated in a narrow beam, a low power amplifier can be used as the transmitter in the satellite. The effective isotropic power from a satellite transmission is the product of the power into the antenna and the antenna gain. A comparison with a National system (230 watt transmitter) indicates more useful power will be transmitted to the ground (coverage area) with a 7.6 watt transmitter in the LOCAL-DBS system.^{13/} This higher available power will provide a better reliability since the DBS frequencies are subject to fading due to atmospheric conditions, especially rain.

^{11/} Weinhouse, OpCit, at p. 36 and figure 2.

^{12/} Id, at p. 36 and figure 4.

^{13/} Id, at table 2.

8. The beams produced in the satellite are isolated from each other. Alternate beams can be used to transmit the same frequencies. A frequency re-use factor of 16 is achieved in a fully developed system, which yields a very spectrally efficient system.^{14/}

LOCAL MARKET INTEGRITY

IV. MARKETING AND ECONOMIC FEASIBILITY

11. One of the more compelling reasons for the Nation to embrace DBS is that substantial benefit to the public interest as well as to the Broadcasters would result from the introduction of a competitive, alternative signal delivery system, one that would eliminate the Broadcaster's total dependence on third parties to reach all of its viewers. Furthermore, DBS' "local" beams will completely cover the ADIs with equally strong signals throughout, thereby avoiding the present over-the-air signal propagation problems and dependence on others to alleviate a Broadcaster's short range terrestrial transmission which fails to reach 40% or more of the TV homes in almost every ADI. This need for a Broadcaster's "self-delivery" will be even more evident when ATV is introduced, as the ATV Broadcaster will be forced to wait, in most areas, a decade or more for the third party deliverers to build or rebuild their facilities to accommodate ATV throughout most, if not all, ADIs. Local ATV Broadcasters using DBS could reach, immediately, viewers in their local market areas that want to receive ATV programs as soon as those viewers acquire ATV receiving equipment.....no need for the viewer to have to wait until some futuristic cable reaches its residence.

12. In addition to providing ATV service, a DBS Broadcaster would be able to supply digital NTSC, 16:9 super NTSC and DATA services without interfering with its existing terrestrial NTSC transmission.

13. The inclusion of local Broadcasting in the DBS satellite slots along with National signals will indeed provide the USA TV viewer with the best of all reception options. DBS without local Broadcasting will be just another splinter service, forcing every viewer to connect to a

16. Attached hereto is a copy of the Executive Summary^{16/} from the original LOCAL-DBS, INC. Business Plan which shows the major financial aspects of a service which would provide an ATV Broadcast channel for every existing local TV station. The *total* delivery cost per home for a DBS delivery system to provide multiple channels of local Broadcasting appears to be less than \$12 per home. No other delivery method can begin to compare to such an inexpensive cost for placing local multiple TV signals within easy reach of every USA dwelling place.

17. To the best of LOCAL-DBS management's knowledge, no Broadcaster or Broadcaster group has rejected the LOCAL-DBS plan for ATV (HDTV); however, every solicited party has deferred making a decision until the USA ATV plan in its entirety has been formally adopted by the Commission and the resulting terrestrial coverage and delivery costs have been analyzed by the Broadcasting industry.

^{16/} See Attachment 6 herein copied from the LOCAL-DBS, INC. July 1991 Business Plan.

CONCLUSION

18. Localism in DBS service is technically and economically feasible. LOCAL-DBS. INC.

ATTACHMENT 1

BACKGROUNDS OF COMPANY OFFICERS

EDWARD L. TAYLOR

Chairman, Taylor Communications Corporation

Ed Taylor is a leader in the world of satellite communications as well as one of the foremost entrepreneurs in the cable television industry. In 1976, he became part of cable history when he founded Southern Satellite Systems, Inc. and began transmitting Atlanta UHF television station WTCG nationwide via satellite. Today that station is known as SuperStation TBS and is one of the most widely distributed satellite services in the country. The original resale common carrier, Southern Satellite Systems is now a wholly-owned subsidiary of TEMPO Enterprises, Inc., also founded by Taylor, a multi-faceted company engaged in many areas of the cable industry. TEMPO was publicly-held (AMEX:TPO) until its December 1988 acquisition by Tele-Communications, Inc.

In 1979, Taylor founded TEMPO Television (formerly Satellite Program Network) a national cable television network which was transmitted twenty-four hours daily until the network was leased to NBC in 1988.

While under Taylor's direction, TEMPO Enterprises continued to expand. In addition to the transmission of SuperStation TBS and the programming of TEMPO Television, TEMPO Enterprises was involved in the acquisition and management of cable television systems via its TEMPO Cable subsidiary and the sale of scrambled programming services to the backyard dish (TVRO) market through TEMPO Development Corporation. The company also pioneered the cable audio segment of the industry with the first multiple-format cable audio package, which was marketed under the title of TEMPO Sound, and transmitted various teletext and data services under the umbrella heading of TEMPO Data.

Taylor began his career with A.T.&T. after graduating with a bachelor's degree in

SELMAN M. KREMER

President, Taylor Communications Corporation

Sel Kremer is responsible for day-to-day operations and investigations of potential investments for Taylor Communications. Kremer has been promoting and distributing cable television products, services and equipment since 1950. He is accurately described as a cable TV veteran and pioneer.

Shortly after forming Southern Satellite Systems in 1976, Edward L. Taylor hired Kremer to market SuperStation TBS and assist in the development of new services for cable systems utilizing satellite technology. From that point on, Kremer began directing various projects for Southern and succeeded in initiating growth in the areas of data delivery systems, audio and subcarrier transmission services.

GARY W. BURNELL

Vice President, Taylor Communications Corporation

Gary Burnell joined TEMPO Enterprises, Inc. in January, 1987 and served as vice president, chief financial officer, secretary and treasurer until mid-1989. Burnell was responsible for all SEC, tax, budgeting, forecasting, treasury and other accounting matters for the multi-faceted and publicly-held satellite communications company. Reporting to the president, he was also responsible for numerous administrative responsibilities, served as coordinator with outside attorneys on many of the corporate and all SEC matters, as an advisor to the human resources department and as vice president in charge of the contracts and customer service portions of TEMPO's common carrier operations. He was instrumental in the drafting of the merger agreement between TEMPO and Tele-Communications, Inc., and was active in the coordination efforts leading up to and the transition work subsequent to the December 1988 merger.

Burnell's background includes over twenty years of diversified financial management and administrative experience. Prior to joining TEMPO, he was vice president of finance for Clyde Petroleum, Inc., the United States subsidiary of a publicly-held United Kingdom corporation. While there, he directed all financial reporting and accounting activities, and was responsible for budgeting, forecasting, tax planning and compliance, regulatory reporting and all administrative functions.

In 1976, Burnell co-founded Burnell, Vaught & Lay, a Tulsa-based public accounting firm which later merged into an international public accounting firm. From 1974 to 1976, he was controller of a Tulsa energy company where he managed financial and tax reporting for the company and its various subsidiaries. He began his career in 1969 with Arthur Andersen & Co., where he served as an audit and tax professional.

An honors graduate of Oklahoma State University, Burnell is a Certified Public Accountant and holds master's and bachelor's degrees in accounting.

STEPHEN ROBERTS

Founder and President of the S. Roberts Company, the prestigious entertainment industry consulting firm.

Roberts was the former president of Twentieth Century Fox Telecommunications, and member of the boards of Twentieth Century Fox Film Corporation and the CBS/FOX Company. He began his career more than twenty-five years ago.

After working for Columbia Pictures in New York and Twentieth Century Fox, in international marketing and distribution, Mr. Roberts was appointed president of International Theatres at Fox. This division was responsible for more than 130 theatres throughout the world. During that period Roberts helped design and develop the Hoyts Theatre Complex in Sydney, Australia, a concept revolutionary in its time, and still considered one of the world's premium entertainment centers.

From 1977 to 1981, Roberts was also president of the Twentieth Century Licensing Corporation, the division responsible for all of the company's merchandising operations. Among his achievements while president, Roberts was responsible for the breakthrough licensing campaign of "STAR WARS", whose merchandising success has proved unprecedented in sales and profits.

In April, 1976, Roberts was asked to head up the newly-created Telecommunications Division, the division responsible for Fox's expanding operations in pay television, home entertainment and worldwide television syndication markets. Shortly after his appointment, Roberts was instrumental in creating PRISM, which is now the most successful, regional, (Philadelphia) pay-television network in the country.

In September, 1982, under Robert's auspices, Fox was the first company to release a major motion picture, "STAR WARS", on pay-per-view. He also executed the exhibition of the final concert of the 1982 tour of The Who on pay-per-view. Both of these programs achieved tremendous financial success and paved the way for the current development of pay-per-view.

Under Robert's leadership, Fox was the first major studio to produce original programming for pay television, including the award-winning series "PAPER CHASE".

In 1977, Roberts launched Fox into the prerecorded home video business, becoming the first studio to license motion pictures for home video--two years ahead of the other major studios. Roberts' vision established Fox as a leader in prerecorded home video, which today is an eight billion dollar business--and growing.

In 1982, Roberts was instrumental in the merger between Fox and CBS, creating CBS/FOX Video. This company is engaged in the creation, marketing and distribution of cassette products and, today, is one of the world's leading home video companies. Roberts served as a member of the CBS/FOX board of directors. In 1982, Roberts also became responsible for the worldwide television operation at Fox.

In May of 1985, Roberts resigned from Twentieth Century Fox to form The S. Roberts Company, a business consulting firm, with primary focus in the entertainment industry and related businesses. The S. Roberts Company enjoys a long and distinguished client list.

Roberts is a member of the Academy of Motion Picture Arts and Sciences, as well as the Academy of Television Arts and Sciences, and a former director of

ATTACHMENT 2

LOCAL-DBS NEWS ARTICLES REPRINTS

SatelliteNews®

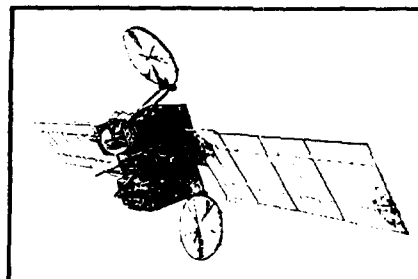
Covering Technology, Regulation & Emerging Applications

Via Satellite Magazine
World Satellite Directory
Satellite XI Conference

September 23, 1991
Washington, D.C.
Vol. 14, No. 38

Dear Executive:

The next launch of an Arianespace rocket (V46) tentatively is scheduled for this Thursday, between 7:43 p.m.-9:52 p.m. EDT. The booster, an Ariane 44P, will carry into orbit the Spar Aerospace-built Anik E1 satellite for Telesat Canada. The telecommunications satellite is the twin of Anik E2, which Ariane launched successfully last April 4 (SN, April 8, p. 1), but it subsequently experienced in-orbit problems when the stubborn C-band antenna refused to deploy. Engineers, however, were able to get the problem antenna to actuate on July 3 (SN, July 8, p. 1). Anik E1, which is based on a GE Astro-Space Division 5000-series platform, will orbit at 111.1°W. It will serve the national Canadian telecommunications network which includes TV distribution, with some overlap into the United States. The satellite has a design life of roughly 13 years.



Anik E1

FIRM PROPOSES NEW SPOT-BEAM DBS SERVICE FOR LOCAL BROADCASTING

SATELLITE NEWS has learned that a group of Tulsa, Okla.-based entrepreneurs, using the name Local-DBS Inc., plans to launch a high-powered direct broadcast satellite (DBS) service in 1995 aimed at providing locally originated, digital television signals to consumers via spot-beam technology.

In an exclusive interview with SATELLITE NEWS associate editor Britton Manasco, Selman Kremer, vice president of marketing for Local-DBS, said that the

LDBS

(Local-DBS)

proposed service will enable local broadcasters to uplink digital NTSC and high-definition television (HDTV) signals to a satellite and then downlink them to consumers within its particular coverage area at costs below those of upgrading their terrestrial systems. Eventually, the company hopes to launch three 30-beam DBS spacecraft in three different orbital positions spanning the contiguous United States.

Beams will range between 200-300 miles in diameter. Smaller beams will be aimed at more populous regions while the larger patterns will be reserved for sparsely populated areas. The company intends to launch the first satellite in 1995 and the second and third spacecraft at one-year intervals thereafter. Palo Alto, Calif.-based Space Systems/Loral, which has gained experience designing spot-beam services for Intelsat, will serve as the prime contractor for the satellites, Kremer added.

- GE Aerospace Laying Off 2,000 Employees; Is Astro-Space for Sale? 4
- Satellite Spotlight: School Days Via Satellite 4
- Japan to Build Experimental Communications Satellite 5
- **Special Report--Part Two of Our Interview With Dr. Arthur C. Clarke 6-7
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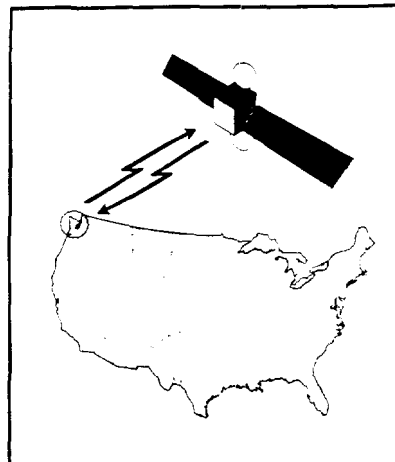
Local-DBS, however, which is not a DBS licensee, has not yet secured an arrangement to offer services in any orbital slot, said Kremer.

Local broadcasters now will have an effective method of competing with cable TV and establishing their independence as media outlets, Kremer said.

Presently, he added, broadcasters are dependent on cable companies for expansion of their coverage and on the networks for a large amount of programming.

This service, he said, will enable local broadcasters "to break the shackles" that currently restrict them by: directly addressing the demands of their regional markets; inserting more local advertising; delivering higher quality signals; and offering new forms of targeted programming. Niche programming, pay-per-view and subscriber-based services are among the new possibilities that Local-DBS will offer broadcasters, he added.

Local-DBS plans to align itself with complementary, national, direct-to-home ventures, such as those planned by Stanley Hubbard's United States Satellite Broadcasting and Hughes Communications Inc., to offer the consumer an impressive alternative to cable, said Kremer. Indeed, Local-DBS plans to adopt the standards for compression, encryption and reception equipment that eventually will be used by the national DBS licensees.



...With Localism Comes Ownership Rights

Receiving equipment, Kremer said, will enable users to watch any regional programming provided within their area as well as any other national services. For that purpose, he added, consumers will need to purchase an actuating antenna mount or "a few tiny dishes" to direct at multiple satellites. Dishes, which he estimated to average 12-18 inches in diameter, could be window or roof mounted.

TV stations, which will gain ownership rights of their own channel in a

broadcasters. However, he acknowledged that it might be necessary to take the firm public at some point. Taylor plans to retain a 40 percent interest in the company through his other firm, Taylor Communications Corp., and intends to sell the remaining 60 percent to investors.

...An Expedited Announcement

Local-DBS had planned to announce the service later this year when, it hoped, it would have secured space segment and a significant amount of financial backing from local

broadcasters, Kremer said.

However, he added, the company has been forced to come forward now because of reports that Advanced Communications, a DBS licensee, plans to announce a regional-based DBS service.

Advanced and Local-DBS, said Kremer, recently broke off negotiations concerning possible use of Advanced's space segment (27 frequencies at 110°W).

"It's our idea, and

[Advanced Communications Inc.'s President Dan Garner] is trying to run with it," he charged.

Garner told us that, indeed, his company is "seriously contemplating" offering a spot beam service for local broadcasters as part of a larger, full-Conus system. However, he added that the idea has been floated about and advocated by several individuals since the late 1970s and therefore, he could not be accused of appropriating the concept from Local-DBS.

...Will Localism Return as a Force in Broadcasting?

Michael Alpert, president of Alpert and Associates, a Washington D.C.-based consulting firm, praised the concept, saying that it has the potential to reestablish localism as a powerful force in television. Spot-beam DBS, he said, will allow broadcasters to provide specialized programming that interests individuals in a particular area. Increased channel space and addressability, he added, will enable broadcasters "to approach their markets differently" and to offer programming that runs counter to cable fare.

"Local broadcasting will change dramatically over time," he said. If broadcasters do not react to emerging trends, he added, they run the risk of becoming obsolete. Local broadcasters, said Alpert, should arrange their business plans with regard to the movement toward individualized entertainment "rather than burying their heads in the sand."

The entire programming package, rather than the technical advantages of receiving local signals via satellite, will be the service's primary selling point in the eyes of the consumer, said Neil Kohn, president of Communications Strategists Inc., a consulting firm in Roswell, Ga. Promoters of a regional DBS service will need to emphasize the advantages of purchasing equipment that enables the consumer to receive local programming as an added feature to the attractive array of programming that national DBS proposes to offer, he added.

Kohn suspects that the national broadcast networks, which currently raise a substantial amount of revenue from local stations they own and operate, will be extremely interested in the service. "They need to do something in the next five or 10 years or, eventually, they will cease to exist."

